

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of representing an arc as a series of conic curves, the method comprising:

- defining an arc;
- determining a bounding box;
- calculating vector angles for a starting vector and ending vector; and
- dividing the arc into a plurality of sub-arcs, each sub-arc being defined by a

conic curve definition;

calculating a shape parameter for the conic curve definition;

determining coordinates of a control point and a mid point of an arc chord; and

defining a control point segment between the mid point of the arc chord and

the control point.

2. (Original) The method of claim 1, wherein each of the sub-arcs is 90 degrees or less.

3. (Canceled)

4. (Original) The method of claim 1, further comprising:
determining a starting point and ending point of each of the plurality of sub-arcs, wherein the plurality of sub-arcs includes at least a first sub-arc and a second sub-arc and further wherein the ending point of the first sub-arc is the starting point of the second sub-arc.

5-7. (Canceled)

8. (Currently Amended) The method of ~~claim 7~~ claim 1, further comprising:
calculating the shape parameter based on a ratio of a distance between the mid point of the arc chord and an intersection of the control point segment and the sub-arc, and a length of the control point segment.
9. (Original) The method of claim 1, wherein a direction of the arc is clockwise.
10. (Original) The method of claim 1, wherein a direction of the arc is counter clockwise.
11. (Original) The method of claim 1, further comprising:
transmitting the conic curve definitions to an imager.
12. (Previously Presented) A computer-readable medium having computer-readable program code embodied therein, the computer-readable program code when executed causing a computer to perform the method of claim 1.
13. (Currently Amended) An apparatus for translating an arc definition into a series of conic curve definitions, comprising:
an arc definer, which defines the arc using a bounding box, starting vector and ending vector; and
an arc divider, which divides the arc into a plurality of sub-arcs, each sub-arc being defined by a conic curve definition;
a control point determining module, which determines the control point for each sub-arc, based on the intersection point of the two lines which are tangent to the endpoints of the sub-arcs; and
a shape parameter module which calculates a shape parameter, based on the ratio of a distance between the mid point of the arc chord and an intersection of a control point segment and the sub-arc, and a length of the control point segment.

14. (Original) The apparatus of claim 13, wherein the arc divider further determines a starting point and ending point for each sub-arc.
15. (Canceled)
16. (Currently Amended) The apparatus of ~~claim 15~~ claim 13, further comprising:
an input/output interface which outputs the ending point, control point and shape parameter for each sub-arc to an imager.